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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,204

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Fabrice T P Saffre

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EXAMINER

MUSTAFA, IMRAN K

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/550,204	Applicant(s) SAFFRE, FABRICE T P	
	Examiner IMRAN MUSTAFA	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 13-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 13-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 21 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

a. A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 13-33 rejected under 35 U.S.C. 102(e) as being anticipated by Baiada (US 2003/0139875).

As to claim 1 Baiada discloses:

a method of sequencing a plurality of candidate vehicles (Paragraph 32), wherein each candidate vehicle in said plurality of candidate vehicles is a candidate to be allocated the next place in a sequence after a first vehicle, said first vehicle being a

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vehicle that has most recently been allocated a place in said sequence (Paragraph 32),
said method comprising the steps of:

receiving information pertaining to one of said candidate vehicles (Paragraph 159)

calculating a value to be attributed to said candidate vehicle on the basis of said received information (Paragraph 33 lines 7-14) and information received from the candidate vehicle most recently allocated a place in said sequence.

Repeating steps i and ii for each of said candidate vehicles (Figure 15 1510, 1511)

Selecting one of said candidate vehicles based on said attributed values (Paragraph 156 lines 8-10);

Allocating said selected candidate vehicle the next place in said sequence (Paragraph 15 lines 1510, 1511).

Wherein the step of selecting one of said candidate vehicles comprises:

Calculating a cost in respect of each of said candidate vehicles, the cost calculated in respect of each candidate vehicle being dependent on each of the at least one value attributed to the candidate vehicle (Paragraph 149).

Performing a comparison of the cost calculated in respect of each candidate vehicle with costs calculated in respect of each of the other candidate vehicles (Paragraph 149); and

Selecting a candidate vehicle in dependence on said costs (Paragraph 149)

As to claim 2 Baiada discloses of vehicles being aircraft (Paragraph 157)

As to claim 3 Baiada discloses of a sequence being that of a landing sequence (Paragraph 157).

As to claim 4 Baiada discloses that the received information is received from the candidate vehicle (Paragraph 33 lines 14-25).

As to claim 5 Baiada discloses of received information including information relating to the size of the candidate vehicle (Paragraph 152)

As to claim 6 Baiada discloses of at least one of said values that is representative of the interval that would have to be maintained between the candidate vehicle and the candidate vehicle most recently allocated a place in the sequence (Paragraph 166)

As to claim 7 Baiada discloses that at least one of said values is representative of a delay that would be experienced by the said candidate vehicle if said candidate vehicle was allocated the next place in the sequence (Paragraph 166).

As to claim 13 discloses a sequencing apparatus arranged in operation to sequence a plurality of candidate vehicles (Paragraph 32), wherein each candidate vehicle in said plurality of candidate vehicles is a candidate vehicle to be allocated the next place in a sequence after a first vehicle, said first vehicle being a vehicle that has most recently been allocated a place in said sequence (Paragraph 32), said data processing apparatus comprising:

a receiver arranged in operation to receive information pertaining to one of said candidate vehicles (Abstract, Paragraph 159);

a calculator arranged in operation to calculate at least one value to be attributed to each of said candidate vehicles on the basis of said received information and information received from the vehicle most recently allocated a place in said sequence

a selector arranged in operation to select one of said candidate vehicles based on said attributed values(Paragraph 33); and

an allocator arranged in operation to allocated said selected candidate vehicle the next place in said sequence (Paragraph 33);

wherein said selector is arranged in operation to calculate a cost in respect of each of said candidate vehicles, the cost calculated in respect of each candidate vehicle being dependent on each of the at least one value attributed to that candidate vehicle, then to perform a comparison of the cost calculated in respect of each candidate vehicle with costs calculated in respect of each of the other candidate vehicles, then to select a candidate vehicle in dependence on said costs(Paragraph 118).

As to claim 14 the claim is interpreted and rejected as claim 2.

As to claim 15 the claim is interpreted and rejected as claim 3.

As to claim 16 Baiada discloses a digital data carrier carrying a program of instructions executable by processing apparatus to perform the method or steps as set out in claim 1 (Paragraph 32).

As to claim 17 Baiada discloses a method of sequencing a plurality of candidate vehicles (Paragraph 32), wherein each candidate vehicle in said plurality of candidate vehicles is a candidate to be allocated the next place in a sequence after a first vehicle,

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said first vehicle being a vehicle that has most recently been allocated a place in said sequence (Paragraph 32), said method comprising the steps of:

receiving information pertaining to one of said candidate vehicles (Paragraph 159)

calculating a value to be attributed to said candidate vehicle on the basis of said received information(Paragraph 33 lines 7-14) and information received from the candidate vehicle most recently allocated a placed in said sequence.

Repeating steps I and ii for each of said candidate vehicles (Figure 15 1510, 1511)

Selecting one of said candidate vehicles based on said attributed values (Paragraph 156 lines 8-10);

Allocating said selected candidate vehicle the next place in said sequence (Paragraph 15 lines 1510, 1511).

Wherein the step of selecting one of said candidate vehicles comprises:

Calculating a cost in respect of each of said candidate vehicles, the cost calculated in respect of each candidate vehicle being dependent one ach of the at least one value attributed to the candidate vehicle(Paragraph 149).

Calculating a relative cost in respect of each of said candidate vehicles(Paragraph 149), the relative cost for a candidate vehicle being dependent on the cost calculated in respect of that candidate vehicle and on the sum of the costs calculated in respect of each of the candidate vehicles(Paragraph 164-165); and

Selecting a candidate vehicle in such a way that the probability of a particular candidate vehicle being selected is independent on the relative cost calculated for that candidate vehicle (Paragraph 183).

As to claim 18 the claim is interpreted and rejected as in claim 2.

As to claim 19 the claim is interpreted and rejected as in claim 3.

As to claim 20 the claim is interpreted and rejected as in claim 4.

As to claim 21 the claim is interpreted and rejected as in claim 5.

As to claim 22 the claim is interpreted and rejected as in claim 6.

As to claim 23 the claim is interpreted and rejected as in claim 7.

As to claim 24 discloses a sequencing apparatus arranged in operation to sequence a plurality of candidate vehicles (Paragraph 32), wherein each candidate vehicle in said plurality of candidate vehicles is a candidate vehicle to be allocated the next place in a sequence after a first vehicle, said first vehicle being a vehicle that has most recently been allocated a place in said sequence (Paragraph 32), said data processing apparatus comprising:

a receiver arranged in operation to receive information pertaining to one of said candidate vehicles (Abstract, Paragraph 159);

a calculator arranged in operation to calculate at least one value to be attributed to each of said candidate vehicles on the basis of said received information and information received from the vehicle most recently allocated a place in said sequence

a selector arranged in operation to select one of said candidate vehicles based on said attributed values(Paragraph 33); and

an allocator arranged in operation to allocated said selected candidate vehicle the next place in said sequence (Paragraph 33);

wherein said selector is arranged in operation to calculate a cost in respect of each of said candidate vehicles(Paragraph 149), the cost calculated in respect of each candidate vehicle being dependent on each of the at least one value attributed to that candidate vehicle, then to calculate a relative cost in respect of each of said candidate vehicles, the relative cost for a candidate vehicle being dependent on the cost calculated in respect of that candidate vehicle and as the sum of the costs calculated in respect of each of the candidate vehicles(Paragraph 164-165); then to select a candidate vehicle in such a way that the probability of a particular candidate vehicle being selected is dependent on the relative cost calculated for that candidate vehicle. (Paragraph 183)

As to claim 25 the claim is interpreted and rejected as in claim 2.

As to claim 26 the claim is interpreted and rejected as in claim 3.

As to claim 27 the claim is interpreted and rejected as in claim 16.

As to claim 28 discloses a method wherein the cost for a candidate vehicle is calculated in such a way that a lower interval results in calculation of a lower cost for that candidate vehicle (Paragraph 118).

As to claim 29 the claim is interpreted and rejected as in claim 28.

As to claim 30 discloses a method wherein the cost for a candidate vehicle is calculated in such a way that a higher delay results in calculation of a lower cost for that candidate vehicle (Paragraph 149).

As to claim 31 the claim is interpreted and rejected as in claim 30.

As to claim 32 discloses a method wherein the cost for a candidate vehicle is calculated according to a cost function

$$f(I,D)= I^{\alpha}/D^{\beta}(\text{Paragraph 169-70})$$

where I represents the interval that would have to be maintained between that candidate vehicle and the vehicle most recently allocated a place in said sequence if said candidate vehicle were allocated the next place in the sequence, and D represents the delay that would be experienced by that candidate vehicle if that candidate vehicle were allocated the next place in the sequence, and alpha and beta are values (Paragraph 169-170).

As to claim 33 the claim is interpreted and rejected as in claim 32.

The statements of intended use or field of use, "wherein" clauses are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Response to Arguments

2. Applicant's arguments with respect to claims 1-7, 13-33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. R. Baiada (US 6,463,383).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMRAN MUSTAFA whose telephone number is (571)270-1471. The examiner can normally be reached on Mon-Fri 7:30AM-5:00PM, Alt Fri, Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/2/2008

/I. M./
Examiner, Art Unit 3663

Imran Mustafa

/Jack W. Keith/
Supervisory Patent Examiner, Art Unit 3663